Summary of California's 303(d) Listing Pollutant Trends

Comparison of California's 2008-2010 list to its prior list (2004-2006)

Overall

Of the total 3 million acres of lakes, bays, estuaries and wetlands in the state, 1.6 million acres are not meeting water quality goals and of these 1.4 million acres still need a TMDL. Of the total 215,000 miles of rivers, streams and shoreline, 30,000 miles are not meeting water quality goals and of these 20,000 miles still need a TMDL. While more than 50% of the lakes, bays, estuaries and wetlands acres have been assessed, less than 20% of the coastline, rivers and stream miles have been assessed. California reviewed over 22,000 data sets in developing the 2008-2010 list, seven times the number reviewed for the prior list. This increase is due to a more thorough review of existing data as well as the gathering of new water quality information.

Pollutant Listing Trends from 2006 to 2010

Greatest Increase - Toxicity

Toxicity listings have increased 170% from 2006 to 2010. Often only certain pollutants are measured when sampling water quality. However, toxicity testing provides very useful information on whether aquatic organisms are experiencing reduced growth or survival by pollutants in a water body acting singularly or cumulatively. In areas where toxicity may be suspected California's monitoring program includes toxicity assessments. The observed increasing trend is likely due to more focused monitoring and assessment of previously existing toxicity, rather than an increase in toxicity in California.

Bacteria Listings

The number of bacteria listings, locations where bacteria concentrations reach levels unsafe for swimming, has increased 90% from 2006 to 2010. However, this increasing trend is likely due to a more thorough assessment of water quality data at California's fresh and saltwater beaches, rather than an increase in bacteria levels. The State's BEACH monitoring program does a thorough job of monitoring the coastal beaches most commonly used by the public and some counties are piloting rapid assessment methods to be able to more quickly assess whether bacteria levels have reached unsafe levels. In combination with recently installed electronic signs at some of the pilot locations, beach goers can be more quickly informed of beach closures due to high bacteria.

Trash Listings

Trash impairments have increased 76% from 2006 to 2010. The observed increasing trend is likely due to better reporting, often by the public, of trash problems in waters. Wildlife can be harmed by ingesting or becoming entangled in floating trash. California is working on a statewide Trash Policy to reduce trash impacts to local wildlife and reduce California's contribution to the Great Pacific Garbage Patch. Several cities have a ban, tax, or incentive program to reduce single-use plastic bags, Styrofoam containers, and other commonly discarded items which cannot decompose. Programs such as those, will make great improvements to reducing the problem of trash polluting lakes, river and the ocean.

Listings impairing fish consumption
The numbers of listings showing pollutants in fish are at levels too high for safe human consumption has increased 24% from 2006 to 2010, with the greatest increases seen in mercury. The observed increasing trend is due to a recent effort to measure pollutants that bioaccumulate in sport fish in California's lakes and coastal waters. With this information California was able to issue advisories warning the public of the risks of consuming fish from certain lakes (http://www.oehha.ca.gov/fish.html). Many of the pollutants causing impairment are no longer manufactured, such as DDT, and are slowly decreasing in concentration over time.

Pesticide listings
Pesticides listings have increased 36% from 2006 to 2010. Much of this increase is due to more thorough monitoring required under the State's innovative Irrigated Lands Regulatory Program. This program is one of California's waiver programs that regulates nonpoint sources of pollution and is groundbreaking nationwide. It requires the agricultural community to limit pollutants in their discharges and conduct monitoring. Close collaboration between the Water Boards and the Department of Pesticide Regulation has helped to make gains in reducing pesticide discharges to surface and groundwater. As an example, along 79 miles of the Feather and Sacramento Rivers the pesticide diazinon is no longer polluting the waterway.
http://www.epa.gov/region9/water/watershed/measurew/feather-sac/index.html